

WHAT IS CLAIMED IS:

1. A method for treating damaged or degenerated fat pads of a host in need thereof, said method comprising injecting into the fat pad of said host a biocompatible solution, with an intrinsic viscosity above 5 mPa.s at physiological temperature, substantially similar to a fatty acid mixture normally present in a healthy fat pad.

2. The method of claim 1, wherein the fat pad is located in the sub-calcaneal, outside arch or metatarsal of a foot.

3. The method of claim 1, wherein said solution is composed of one or more natural or unnatural saturated fatty acids and/or one or more of mono and poly unsaturated fatty acids.

4. The method of claim 3, wherein the saturated fatty acid is selected from the group consisting of palmitate, stearate, and myristate, and the like; and their acyclic, cyclic, heterocyclic, aromatic ester derivatives containing one or more groups such as hydroxy, acyloxy, aryloxy, amino, sulfhydryl, sulfonate, sulfate, phosphonate, phosphate, bis-, tris- and poly-phosphonates and phosphates, phosphatidyl, nucleosides, oligosaccharides, polysaccharides, polyols, and the like, and any mixture thereof.

5. The method of claim 3, wherein the unsaturated fatty acid is selected from the group consisting of

palmitoleate, oleate, vaccenate and linoleate, and the like; and their acyclic, cyclic, heterocyclic, aromatic ester derivatives containing one or more groups such as hydroxy, acyloxy, aryloxy, amino, sulfhydryl, sulfonate, sulfate, phosphonate, phosphate, bis-, tris- and poly-phosphonates and phosphates, phosphatidyl, nucleosides, oligosaccharides, polysaccharides, polyols, and the like, and any mixture thereof.

6. The method of claim 3, wherein said solution is an autologous solution.

7. The method of claim 3, wherein said fatty acids are mixed with a metabolically absorbable liquid vehicle, to reduce viscosity and allow injectability at room temperature.

8. The method of claim 7, wherein the liquid vehicle selected from the group consisting of water, alcoholic solvents, alkylene glycols and poly-alcohols.

9. The method of claim 7, wherein the liquid vehicle is selected from the group consisting of ethanol, isopropyl alcohol, ethylene glycol and glycerol, and a mixture thereof.

10. The method of claim 3, wherein said solution comprises at least palmitate and oleate.

11. The method of claim 1, wherein said solution becomes highly-viscous or turns into a gel after injection.

12. The method of claim 1, wherein the solution comprises a polymer or a biopolymer.

13. The method of claim 12, wherein the polymer is selected from the group consisting of cellulose, a substituted derivative thereof, poly(ethylene glycol) poly(propylene glycol), a copolymer of poly(ethylene glycol), a copolymer of poly(propylene glycol), a poly(ethylene glycol) copolymer with a poly(hydroxy acid), a poly(vinyl alcohol), or a poly(vinyl pyrrolidone), and the like, or a mixture thereof.

14. The method of claim 12, wherein the biopolymer is selected from the group consisting of a polysaccharide and a polypeptide, or a derivative thereof.

15. The method of claim 14, wherein the biopolymer is selected from the group consisting of thermo-gelling chitosan-based solution, collagen, a derivative of collagen, hyaluronic acid, poly(ethylene glycol), polylysine, gelatin, chitosan, alginate, and chondroitin sulfate.

16. The method of claim 11, wherein the solution comprises monomers and/or oligomers, or a mixture of two or more different monomers and polymerises or copolymerises within the pad after injection.

17. The method of claim 11, wherein the solution contains a viscous component mixed with a metabolically

absorbable liquid vehicle, to reduce viscosity and to allow injectability, wherein after injection, the vehicle is absorbed in the host, thus increasing the concentration and hence the viscosity of the solution component.

18. The method of claim 1, wherein said solution comprises a natural, artificial or synthetic polymer and a metabolically absorbable liquid vehicle.

19. The method of claim 1, wherein said solution comprises an aqueous liquid.

20. The method of claim 1, wherein said solution comprises a non-aqueous liquid.

21. The method of claim 1, wherein said solution is a self-gelling polymeric solution.

22. The method of claim 1, wherein said solution is a thermo-gelling solution.

23. The method of claim 1, wherein said solution is a thermo-gelling chitosan-based solution.

24. The method of claim 1, wherein said solution comprises of hyaluronic acid, or derivative thereof, and a metabolically absorbable liquid vehicle.

25. The method of claim 1, wherein said solution comprises of collagen, or a derivative thereof, and a metabolically absorbable liquid vehicle.

26. The method of claim 1, wherein said solution comprises elements selected from the group consisting of fatty acids, thermogelling chitosan-based solution, collagen or derivatives thereof, hyaluronic acid or derivatives thereof, poly(ethylene glycol), and a metabolically absorbable liquid vehicle.

27. The method of claim 1, wherein said solution comprises a solid component.

28. The method of claim 27, wherein the solid component is a microparticle or nanoparticle.

29. The method of claim 1, wherein said solution is liquid at a temperature of and below 20 degrees Celsius, but forms a gel at temperatures above 30 degrees Celsius.

30. The method of claim 1, wherein said solution is liquid at a temperature of and below 20 degrees Celsius, but forms a gel at temperatures above 30 degrees Celsius.

31. The method of claim 1, wherein said solution is stored under a gel or solid form, at a temperature below physiological temperature, said solution being heated to physiological temperature to be injectable.

32. The method of claim 1, wherein said solution is pre-heated at a temperature between 35 and 45 degrees Celsius to be liquid and injectable.

33. The method of claim 1 wherein said solution is a gel at the time of injection.

34. The method of claim 1, wherein said solution is injected into the fat pad by use of a syringe and a hypodermic needle.

35. The method of claim 1, wherein said method is repeated periodically.

36. The method of claim 1, wherein said solution contains a pharmaceutical agent.